UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/824,787	04/04/2001	Maurice Zauderer	1821.0040001/EKS/TJS

26111
STERNE, KESSLER, GOLDSTEIN & FOX PLLC
1100 NEW YORK AVENUE, N.W., SUITE 600
WASHINGTON, DC 20005-3934

CONFIRMATION NO. 2970
FORMALITIES LETTER

OC000000006839213

Date Mailed: 10/03/2001

NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

Filing Date Granted

The U.S. Patent and Trademark Office has received your reply on 07/17/2001 to the Notice to File Missing Parts (Notice) mailed 05/17/2001 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

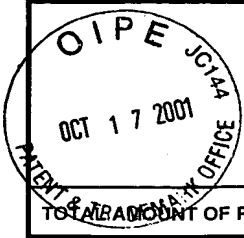 **For questions regarding compliance to these requirements, please contact:**

  - **For Rules Interpretation, call (703) 308-4216**
  - **To Purchase PatentIn Software, call (703) 306-2600**
  - **For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov**

A copy of this notice __MUST__ be returned with the reply.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

PTO/SB/17 (10-01)
Approved for use through 10/31/2002. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL
for FY 2002

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT ($) 920.00

Complete if Known	
Application Number	09/824,787
Filing Date	April 4, 2001
First Named Inventor	Maurice Zauderer
Examiner Name	To be Assigned
Group Art Unit	1645
Attorney Docket No.	1821.0040001/EKS/TJS

OIPE JC144 OCT 17 2001

METHOD OF PAYMENT (check one)

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:

Deposit Account Number: 19-0036

Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C.

☒ Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17

☐ Applicant claims small entity status See 37 CFR 1.27

2. ☐ Payment Enclosed:
☐ Check ☐ Credit card ☐ Money Order ☒ Other*

*Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Fee ($)	Small Entity Fee Code	Fee ($)	Fee Description	Fee Paid
101	740	201	370	Utility filing fee	
106	330	206	165	Design filing fee	
107	510	207	255	Plant filing fee	
108	740	208	370	Reissue filing fee	
114	160	214	80	Provisional filing fee	

SUBTOTAL (1) ($) 0

2. EXTRA CLAIM FEES

	Extra	Fee from below	Fee Paid
Total Claims 40 - 40** = 0		X 18.00	= 0
Indep. Claims 8 - 8** = 0		X 84.00	= 0
Multiple Dependent		280.00	= 0

Large Fee Code	Entity Fee ($)	Small Fee Code	Entity Fee ($)	Fee Description
103	18	203	9	Claims in excess of 20
102	84	202	42	Independent claims in excess of 3
104	280	204	140	Multiple dependent claim
108	84	209	42	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($) 0

** or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Fee ($)	Small Entity Fee Code	Fee ($)	Fee Description	Fee paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for *ex parte* reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	400	216	200	Extension for reply within second month	
117	920	217	460	Extension for reply within third month	920.00
118	1,440	218	720	Extension for reply within fourth month	
128	1,960	228	980	Extension for reply within fifth month	
119	320	219	160	Notice of Appeal	
120	320	220	160	Filing a brief in support of an appeal	
121	280	221	140	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,280	241	640	Petition to revive - unintentional	
142	1,280	242	640	Utility issue fee (or reissue)	
143	460	243	230	Design issue fee	
144	620	244	310	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	130	123	130	Petitions related to provisional applications	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	481	40	Recording each patent assignment per property (times number of properties)	
146	740	246	370	Filing a submission after final rejection (37 CFR 1.129(a))	
149	740	249	370	For each additional invention to be examined (37 CFR 1.129(b))	
179	740	279	370	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify):

Other fee (specify):

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 920.00

SUBMITTED BY

				Complete (*if applicable*)	
Name (*Print/Type*)	Timothy J. Shea, Jr.	Registration No. (*Attorney/Agent*)	41,306	Telephone	202-371-2600
Signature	*Timothy J. Shea*			Date	10/17/01

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

sequence-fee

AA XC
Box SE

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.
ATTORNEYS AT LAW
1100 NEW YORK AVENUE, N.W. • WASHINGTON, D.C. 20005-3934

PHONE: (202) 371-2600 • FACSIMILE: (202) 371-2540 • www.skgf.com

ROBERT GREENE STERNE
EDWARD J. KESSLER
JORGE A. GOLDSTEIN
SAMUEL L. FOX***
DAVID K.S. CORNWELL
ROBERT W. ESMOND
TRACY-GENE G. DURKIN
MICHELE A. CIMBALA
MICHAEL B. RAY
ROBERT E. SOKOHL
ERIC K. STEFFE
MICHAEL Q. LEE
STEVEN R. LUDWIG

JOHN M. COVERT
LINDA E. ALCORN
ROBERT C. MILLONIG
MICHAEL V. MESSINGER
JUDITH U. KIM
TIMOTHY J. SHEA, JR.
DONALD R. MCPHAIL
PATRICK E. GARRETT
JEFFREY T. HELVEY*
HEIDI L. KRAUS
JEFFREY R. KURIN
RAYMOND MILLIEN
PATRICK D. O'BRIEN

LAWRENCE B. BUGAISKY
CRYSTAL D. SAYLES
EDWARD W. YEE
ALBERT L. FERRO*
DONALD R. BANOWIT
PETER A. JACKMAN
MOLLY A. MCCALL
TERESA U. MEDLER
JEFFREY S. WEAVER
KRISTIN K. VIDOVICH
KENDRICK P. PATTERSON
DONALD J. FEATHERSTONE
GRANT E. REED

VINCENT L. CAPUANO
JOHN A. HARROUN*
ALBERT J. FASULO II*
ELDORA ELLISON FLOYD*
W. RUSSELL SWINDELL
THOMAS C. FIALA
BRIAN J. DEL BUONO*
VIRGIL L. BEASTON*
RYAN J. STAMPER*
KAREN R. MARKOWICZ**
SUZANNE E. ZISKA**
ANDREA J. KAMAGE**
NANCY J. LEITH**

ELIZABETH J. HAANES**
MARK P. TERRY**
JOSEPH M. CONRAD, III**
DOUGLAS M. WILSON**
REGINALD D. LUCAS**
ANN E. SUMMERFIELD**
CYNTHIA M. BOUCHEZ**
HELENE C. CARLSON**
BRUCE E. CHALKER**
DUSTIN T. JOHNSON**
MATTHEW J. DOWD**

*LIMITED TO MATTERS
  AND PROCEEDINGS BEFORE
  FEDERAL COURTS & AGENCIES
**REGISTERED PATENT AGENT
***SENIOR COUNSEL

October 17, 2001

WRITER'S DIRECT NUMBER:
(202) 371-2679
INTERNET ADDRESS:
TSHEA@SKGF.COM

Commissioner for Patents
Washington, D.C. 20231

Art Unit: 1645

Re: U.S. Utility Patent Application
        Appl. No. 09/824,787; Filed: April 4, 2001
        For: **Gene Differentially Expressed in Breast and Bladder**
                Cancer, and Encoded Polypeptides
        Inventors: ZAUDERER *et al.*
        Our Ref: 1821.0040001/EKS/TJS

Sir:

In reply to the Notice of Incomplete Reply (Nonprovisional) dated October 3, 2001, Applicants submit the following documents for appropriate action by the U.S. Patent and Trademark Office:

1.   Petition for Extension of Time under 37 C.F.R. § 1.136 (*in duplicate*);

2.   PTO Fee Transmittal Form (PTO/SB/17) (*in duplicate*);

3.   Copy of Notice of Incomplete Reply (Nonprovisional);

4.   Amendment and Submission of Substitute Sequence Listing Under 37 C.F.R. § 1.825(a);

5.   Substitute paper copy and computer readable copy of the Sequence Listing; and

Commissioner for Patents
October 17, 2001
Page 2

6. Return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier.

In accordance with 37 C.F.R. § 1.821(f), the paper copy and the computer readable copy of the Sequence Listing submitted herewith are the same. In accordance with 37 C.F.R. § 1.821(g), the submission of this sequence listing includes no new matter.

The U.S. Patent and Trademark Office is hereby authorized to charge our Deposit Account No. 19-0036. If extensions of time under 37 C.F.R. § 1.136 other than those otherwise provided for herewith are required to prevent abandonment of the present patent application, then such extensions of time are hereby petitioned, and any fees therefor are hereby authorized to be charged to our Deposit Account No. 19-0036. A duplicate copy of this letter is enclosed.

Respectfully submitted,
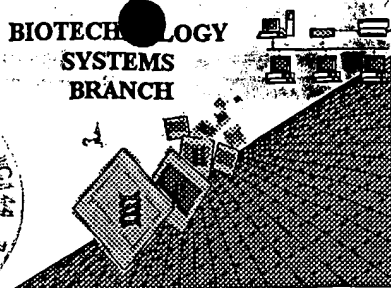
STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Timothy J. Shea, Jr.
Attorney for Applicants
Registration No. 41,306

TJS/slw
Enclosures

P:\USERS\SWILLIAM\TJS Folder (New)\1821.0040001\sequence-ptoltr

RAW SEQUENCE LISTING
ERROR REPORT

BIOTECHNOLOGY
SYSTEMS
BRANCH

OCT 1 7 2001

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/824,787A_

Source: _OIPE_

Date Processed by STIC: _7/26/2001_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:
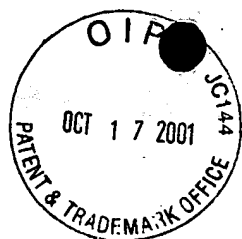
Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.
Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).
Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
http://www.uspto.gov/web/offices/pac/checker

OIPE

RAW SEQUENCE LISTING   DATE: 07/26/2001
PATENT APPLICATION: US/09/824,787A   TIME: 10:25:21

        Input Set : A:\seqlist_1821 0040001.txt
        Output Set: N:\CRF3\07262001\I824787A.raw

 4 <110> APPLICANT: Zauderer, Maurice
 5   Evans, Elizabeth E.
 6   Borrello, Melinda A.
 8 <120> TITLE OF INVENTION: Gene Differentially Expressed in Breast and
 9   Bladder Cancer, and Encoded Polypeptides
11 <130> FILE REFERENCE: 1821.0040001
13 <140> CURRENT APPLICATION NUMBER: 09/824,787A
14 <141> CURRENT FILING DATE: 2001-04-04
16 <150> PRIOR APPLICATION NUMBER: 60/194,463
17 <151> PRIOR FILING DATE: 2000-04-04
19 <160> NUMBER OF SEQ ID NOS: 147
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 354
25 <212> TYPE: DNA
26 <213> ORGANISM: Homo sapiens
28 <220> FEATURE:
29 <221> NAME/KEY: CDS
30 <222> LOCATION: (7)..(354)
32 <400> SEQUENCE: 1
33 gccgcg atg agc ggg gag ccg ggg cag acg tcc gta gcg ccc cct ccc   48
34   Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro
35   1   5   10
37 gag gag gtc gag ccg ggc agt ggg gtc cgc atc gtg gtg gag tac tgt   96
38 Glu Glu Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys
39 15   20   25   30
41 gaa ccc tgc ggc ttc gag gcg acc tac ctg gag ctg gcc agt gct gtg   144
42 Glu Pro Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val
43   35   40   45
45 aag gag cag tat ccg ggc atc gag atc gag tcg cgc ctc ggg ggc aca   192
46 Lys Glu Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr
47   50   55   60
49 ggt gcc ttt gag ata gag ata aat gga cag ctg gtg ttc tcc aag ctg   240
50 Gly Ala Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu
51   65   70   75
53 gag aat ggg ggc ttt ccc tat gag aaa gat ctc att gag gcc atc cga   288
54 Glu Asn Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg
55   80   85   90
57 aga gcc agt aat gga gaa acc cta gaa aag atc acc aac agc cgt cct   336
58 Arg Ala Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro
59   95   100   105   110
61 ccc tgc gtc atc ctg tga   354
62 Pro Cys Val Ile Leu
63   115
66 <210> SEQ ID NO: 2
67 <211> LENGTH: 115
68 <212> TYPE: PRT

RAW SEQUENCE LISTING   DATE: 07/26/2001
PATENT APPLICATION: US/09/824,787A   TIME: 10:25:21

Input Set : A:\seqlist_1821 0040001.txt
Output Set: N:\CRF3\07262001\I824787A.raw

```
 69 <213> ORGANISM: Homo sapiens
 71 <400> SEQUENCE: 2
 72 Met Ser Gly Glu Pro Gly Gln Thr Ser Val Ala Pro Pro Pro Glu Glu
 73   1               5                  10                  15
 74 Val Glu Pro Gly Ser Gly Val Arg Ile Val Val Glu Tyr Cys Glu Pro
 75              20                  25                  30
 76 Cys Gly Phe Glu Ala Thr Tyr Leu Glu Leu Ala Ser Ala Val Lys Glu
 77           35                  40                  45
 78 Gln Tyr Pro Gly Ile Glu Ile Glu Ser Arg Leu Gly Gly Thr Gly Ala
 79      50                  55                  60
 80 Phe Glu Ile Glu Ile Asn Gly Gln Leu Val Phe Ser Lys Leu Glu Asn
 81   65                  70                  75                  80
 82 Gly Gly Phe Pro Tyr Glu Lys Asp Leu Ile Glu Ala Ile Arg Arg Ala
 83              85                  90                  95
 84 Ser Asn Gly Glu Thr Leu Glu Lys Ile Thr Asn Ser Arg Pro Pro Cys
 85           100                 105                 110
 86 Val Ile Leu
 87           115
 90 <210> SEQ ID NO: 3
 91 <211> LENGTH: 518
 92 <212> TYPE: DNA
 93 <213> ORGANISM: Homo sapiens
 95 <400> SEQUENCE: 3
 96 gggccgcgat gagcgtagcc ggggcagacg tccgtagcgc cccctcccga ggaggtcgag 60
 97 ccgggcagtg gggtccgcat cgtggtggag tactgtgaac cctgcggctt cgaggcgacc 120
 98 tacctggagc tggccagtgc tgtgaaggag cagtatccgg gcatcgagat cgagtcgcgc 180
 99 ctcggggggca caggtgcttt gagatagaga taaatggaca gctggtgttc tccaagctgg 240
100 agaatggggg ctttccctat gagaaagatc tcattgaggc catccgaaga gccagtaatg 300
101 gagaaaccct agaaaagatc accaacagcc gtcctccctg cgtcatcctg tgactgcaca 360
102 ggactctggg ttcctgctct gttctggggt ccaaaccttg gtctccctttt ggtcctgctg 420
103 ggagctcccc tgcctctttc acctacttag ctccttagca aagagacact ggcctccact 480
104 ttgcccttttg ggtacaaaga aggaatagaa gattccgt                        518
107 <210> SEQ ID NO: 4
108 <211> LENGTH: 621
109 <212> TYPE: DNA
110 <213> ORGANISM: Homo sapiens
112 <220> FEATURE:
113 <221> NAME/KEY: misc_feature
114 <222> LOCATION: (14)..(15)
115 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
117 <220> FEATURE:
118 <221> NAME/KEY: misc_feature
119 <222> LOCATION: (24)..(24)
120 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
122 <220> FEATURE:
123 <221> NAME/KEY: misc_feature
124 <222> LOCATION: (28)..(28)
125 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
127 <220> FEATURE:
```

RAW SEQUENCE LISTING   DATE: 07/26/2001
PATENT APPLICATION: US/09/824,787A   TIME: 10:25:21

          Input Set : A:\seqlist_1821 0040001.txt
          Output Set: N:\CRF3\07262001\I824787A.raw

128 <221> NAME/KEY: misc_feature
129 <222> LOCATION: (31)..(31)
130 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
132 <220> FEATURE:
133 <221> NAME/KEY: misc_feature
134 <222> LOCATION: (33)..(33)
135 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
137 <220> FEATURE:
138 <221> NAME/KEY: misc_feature
139 <222> LOCATION: (491)..(491)
140 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
142 <220> FEATURE:
143 <221> NAME/KEY: misc_feature
144 <222> LOCATION: (535)..(535)
145 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
147 <220> FEATURE:
148 <221> NAME/KEY: misc_feature
149 <222> LOCATION: (557)..(557)
150 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
152 <220> FEATURE:
153 <221> NAME/KEY: misc_feature
154 <222> LOCATION: (565)..(565)
155 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
157 <220> FEATURE:
158 <221> NAME/KEY: misc_feature
159 <222> LOCATION: (574)..(574)
160 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
162 <220> FEATURE:
163 <221> NAME/KEY: misc_feature
164 <222> LOCATION: (588)..(588)
165 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
167 <220> FEATURE:
168 <221> NAME/KEY: misc_feature
169 <222> LOCATION: (595)..(595)
170 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
172 <220> FEATURE:
173 <221> NAME/KEY: misc_feature
174 <222> LOCATION: (606)...(606)
175 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
177 <400> SEQUENCE: 4
178 ggggcccgag cggnngccag cgantgangg nangccggga cagacgtccg tagcgccccc 60
179 tcccgaggag gtcgagccgg gcagtggggt ccgcatcgtg gtggagtact gtgaaccctg 120
180 cggcttcgag gctacctacc tggagctggc cagtgctgtg aaggagcagt atccgggcat 180
181 cgagatcgag tcgcgcctcg ggggcacagg tgctttgaga tagagataaa tggacagctg 240
182 gtgttctcca agctggagaa tggggggcttt ccctatgaga aagatctcat tgaggccatc 300
183 cgaagagcca gtaatggaga aaccctagaa aagatcacca acaagcccgt cctcccttgc 360
184 gtcatcctgt gacttgcaca ggactctggg gttcctgctc tgttctgggg gtccaaacct 420
185 tggtctccct ttggtcctgc tgggaagctc cccctgcctc tttcccctaa ttagctctta 480
186 agcaaagaga ncctggcctc caatttgccc tttgggtaca aagaaggaat agaaatccg 540

RAW SEQUENCE LISTING   DATE: 07/26/2001
PATENT APPLICATION: US/09/824,787A   TIME: 10:25:21

Input Set : A:\seqlist_1821 0040001.txt
Output Set: N:\CRF3\07262001\I824787A.raw

187 tggccttggg gaagganaaa aaatntccat aaanttttca ggcaactnaa acccnttcca 600
188 ggtaantccc agaaaaccaa t   621
191 <210> SEQ ID NO: 5
192 <211> LENGTH: 683
193 <212> TYPE: DNA
194 <213> ORGANISM: Homo sapiens
196 <220> FEATURE:
197 <221> NAME/KEY: misc_feature
198 <222> LOCATION: (608)..(608)
199 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
201 <400> SEQUENCE: 5
202 gagccggggc agacgtccgt agcgccccct cccgaggagg tcgagccggg cagtggggtc 60
203 cgcatcgtgg tggagtactg tgaaccctgc ggcttcgagg cgacctacct ggagctggcc 120
204 agtgctgtga aggagcagta tccgggcatc gagatcgagt cgcgcctcgg gggcacaggt 180
205 gcctttgaga tagagataaa tggacagctg gtgttctcca agctggagaa tgggggcttt 240
206 ccctatgaga aagatctcat tgaggccatc cgaagagcca gtaatggaga aaccctagaa 300
207 aagatcacca acagccgtcc tccctgcgtc atcctgtgac tgcacaggac tctgggttcc 360
208 tgctctgttc tggggtccaa accttggtct ccctttggtc ctgctgggag ctcccctgc 420
209 ctctgtcccc tacttagctc cttagcaaag agacctggc ctccactttg ccctttgggt 480
210 acaaagaagg aatagaagat tccgtggcct tgggggcagg agagagacac tctccatgaa 540
211 cacttctcca gccacctcat accccttcc cagggtaagt gcccacgaaa gcccagtcca 600
212 ctcttcgnct cggtaatacc tgtctgatgc cacagatttt atttattctc ccctaacccca 660
213 gggcaatgtc agctattgcc agt   683
216 <210> SEQ ID NO: 6
217 <211> LENGTH: 490
218 <212> TYPE: DNA
219 <213> ORGANISM: Homo sapiens   ——————→ what about "n" at location 12?
221 <220> FEATURE: (p.5)
222 <221> NAME/KEY: misc_feature
223 <222> LOCATION: (17)..(17)
224 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
226 <220> FEATURE:
227 <221> NAME/KEY: misc_feature
228 <222> LOCATION: (23)..(24)
229 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
231 <220> FEATURE:
232 <221> NAME/KEY: misc_feature
233 <222> LOCATION: (65)..(67)
234 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
236 <220> FEATURE:
237 <221> NAME/KEY: misc_feature
238 <222> LOCATION: (442)..(442) (432)..(432) ←— p.5
239 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
241 <220> FEATURE:
242 <221> NAME/KEY: misc_feature
243 <222> LOCATION: (454)..(454)
244 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
246 <220> FEATURE:
247 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING   DATE: 07/26/2001
PATENT APPLICATION: US/09/824,787A TIME: 10:25:21

Input Set : A:\seqlist_1821 0040001.txt
Output Set: N:\CRF3\07262001\I824787A.raw

```
      248 <222> LOCATION: (461)..(461)
      249 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
      251 <220> FEATURE:
      252 <221> NAME/KEY: misc_feature
      253 <222> LOCATION: (490)..(490)
      254 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
      256 <400> SEQUENCE: 6
W--> 257 gattcggcac gngggcnagg gannggggca gacgtccgta gcgccccctc ccgaggaggt 60
W--> 258 cgagnnnggc agtggggtcc gcatcgtggt ggagtactgt gaaccctgcg gcttcgaggc 120
      259 gacctacctg gagctggcca gtgctgtgaa ggagcagtat ccgggcatcg agatcgagtc 180
      260 gcgcctcggg ggcacaggtg ctttgagata gagataaatg gacagctggt gttctccaag 240
      261 ctggagaatg ggggctttcc ctatgagaaa gatctcattg aggccatccg aagaagccag 300
      262 taatggagaa accctagaaa agatcaccaa caagcccgtc ctccctgcgt catcctgtga 360
      263 ctgcacagga ctctgggttc ctgctctgtt ctggggtcca aaccttggtc tccctttggt 420
W--> 264 cctgctggga gntccccctg cctctttccc ctanttagct ncttagcaaa gagaccctgg 480
W--> 265 cctccacttn                                                       490
      268 <210> SEQ ID NO: 7
      269 <211> LENGTH: 557
      270 <212> TYPE: DNA
      271 <213> ORGANISM: Homo sapiens
      273 <220> FEATURE:
      274 <221> NAME/KEY: misc_feature
      275 <222> LOCATION: (28)..(28)
      276 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
      278 <220> FEATURE:
      279 <221> NAME/KEY: misc_feature
      280 <222> LOCATION: (504)..(504)
      281 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
      283 <220> FEATURE:
      284 <221> NAME/KEY: misc_feature
      285 <222> LOCATION: (527)..(527)
      286 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
      288 <220> FEATURE:
      289 <221> NAME/KEY: misc_feature
      290 <222> LOCATION: (545)..(545)
      291 <223> OTHER INFORMATION: n is any nucleotide of a, t, g or c
      293 <400> SEQUENCE: 7
W--> 294 cgtccgtagc gccccctccc gaggaggnct gagccgggca gtggggtccg catcgtggtg 60
      295 gagtactgtg aaccctgcgg cttcgaggcg acctacctgg agctggccag tgctgtgaag 120
      296 gagcagtatc cgggcatcga gatcgagtcg cgcctcgggg gcacaggtgc tttgagatag 180
      297 agataaatgg acagctggtg ttctccaagc tggagaatgg gggctttccc tatgagaaag 240
      298 atctcattga ggccatccga agagccagta atggaagaaa ccctagaaaa gatcaccaac 300
      299 agccgtcctc ccttgcgtca tcctgtgact tgcacaggac tctgggttcc tgctctgttc 360
      300 ttggggtcca aacctttggt ctccctttgg tcctgctggg aagctccccc tgcctctttt 420
      301 cccctactta agctcctta gcaaagaaga acctgggcct tccacttttg cccttttggg 480
W--> 302 gtacaaaaga aggaattaga aganttccgt gggcctttgg gggcaangaa gaagagaaac 540
W--> 303 tcttnccatt gaacaat                                               557
      306 <210> SEQ ID NO: 8
      307 <211> LENGTH: 508
```

Use of n and/or Xaa has been detected in the Sequence Listing.
Review the Sequence Listing to insure a corresponding
explanation is presented in the <220> to <223> fields of
each sequence using n or Xaa.

```
L:178  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:186  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:187  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:188  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:212  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:257  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:258  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:264  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:265  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:294  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:302  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:303  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:352  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:359  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:460  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:461  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:515  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:523  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:524  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:525  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:579  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:580  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:585  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:619  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:625  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:694  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:698  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:699  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:700  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:701  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17
L:715  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
L:734  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:789  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:840  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:845  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23
L:899  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:900  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:905  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:906  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:932  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:933  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:935  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:959  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:965  M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:1009 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1014 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1015 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
L:1016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27
```

VERIFICATION SUMMARY DATE: 07/26/2001
PATENT APPLICATION: US/09/824,787A TIME: 10:25:22

Input Set : A:\seqlist_1821 0040001.txt
Output Set: N:\CRF3\07262001\I824787A.raw

L:1054 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:1056 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28